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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/584,268	06/01/2000	JUPING YANG	106327	3021

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EXAMINER

RAHIMI, IRAJ A

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/584,268

Applicant(s)

YANG ET AL.

Examiner

(Iraj) Alan Rahimi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on January 18, 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 13, 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1, 2, 4-6, 13 and 14 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

1. In papers filed on January 18, 2005 applicant amended claims 1, 13 and 14. Applicant noted in the Remarks that claims 1-14 are pending. Applicant is reminded that claims 1-6, 13 and 14 are under examination and pending.

Response to Arguments

2. Applicant's arguments, see Remarks, filed January 18, 2005, with respect to the rejection(s) of claim(s) 1-6, 13 and 14 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of amendments made to the claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birgmeir (US patent 5,216,521) in view of Noguchi (US patent 6,774,938).

Regarding claim 1, Birgmeir discloses an image correction apparatus comprising:

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an image obtaining unit (memory 6) that obtains image data from outside (scanner 1) constituted of a plurality of pixels each having a value of a color component among a plurality of color components;

an average value calculation unit that calculates average values of color component values corresponding to individual color components in said image data (column 7, lines 7-21); and

a correction unit that corrects the color component values of individual pixels to match the average values of the color component values corresponding to individual color components with at least one specific reference value (column 7, lines 22-53).

However, Birgmeir does not disclose that color component values are for pixels. Noguchi discloses in column 1, lines 27-32 that for each RGB channel, mean value of pixels for each channel is computed.

Bergmeir and Noguchi are combinable because they are from the same field of endeavor that is image enhancement.

At the time of invention it would have been obvious to a person ordinary skill in the art to use the average of pixels for each RGB channel.

The motivation to do so would have been to compensate for white balance.

Therefore it would have been obvious to combine Bergmeir and Noguchi to obtain the invention as specified in claim 1.

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Regarding claim 2, Birgmeir discloses an image correction apparatus according to claim 1, wherein:

said correction unit uses one common reference value for said plurality of color components as said reference value (column 7, lines 44-48).

Regarding claims 13 and 14, arguments analogous to those presented for claim 1, are applicable.

5. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birgmeir (US patent 5,216,521) in view of Noguchi (US patent 6,774,938) and further in view of Tamura (US patent 6,040,860).

Regarding claim 4, Birgmeir and Noguchi do not disclose an image correction apparatus according to claim 1, wherein:

said correction unit fixes a maximum value and a minimum value of the color component values corresponding to individual color components not to be corrected and corrects color component values between the maximum value and the minimum value by using a specific function. However, Tamura discloses in column 19, lines 1-15 that various statistical values including the difference between the maximum and minimum color signals may be used for evaluating the input image.

Birgmeir, Noguchi and Tamura are combinable because they are from the same field of endeavor that is color correction.

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It would have been obvious to a person skilled in the art, at the time of invention to use the teaching of Tamura as it provides varieties of statistical values for evaluating the RGB signal.

The motivation for doing so would have been to output an image with rich graduation across the full range of subject lighting.

Therefore, it would have been obvious to a person skilled in the art, at the time of invention to combine Birgmeir with Tamura to obtain invention as specified in claim 4.

Regarding claim 6, Tamura discloses an image correction apparatus according to claim 2, wherein:

said correction unit sets a maximum value among said average values of the color component values corresponding to individual color components as said common reference value (column 19, lines 1-15).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Birgmeir (US patent 5,216,521) in view of Noguchi (US patent 6,774,938) and further in view of Terashita (US patent 4,641,959).

Regarding claim 5, Birgmeir and Noguchi do not disclose an image correction apparatus according to claim 2, wherein: said correction unit sets a value achieved by further averaging said average values of the color component values corresponding to individual color components as said common reference value.

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However, Terashita discloses in column 8, lines 10-30 that average of RGB average values are calculated for removing defects. Birgmeir, Noguchi and Terashita are combinable because they are from the same field of endeavor that is color correction.

Therefore, it would have been obvious to a person skilled in the art, at the time of invention to combine the averaging technique of Terashita with Birgmeir.

The motivation to do so would have been to remove defects in the boundary areas. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to combine Birgmeir and Terashita to obtain the invention as specified.

Allowable Subject Matter

7. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art and the prior art of record specially, Birgmeir does not teach the limitations of the claim as listed.

Other Prior Art Cited

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eschbach (US patent 5,357,352) discloses a method of correcting color shift.

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Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Iraq) Alan Rahimi whose telephone number is 703-306-3473. The examiner can normally be reached on Mon.-Fri. 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles can be reached on 703-305-4712. The fax phone numbers for the


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organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.



Alan Rahimi
February 28, 2005



TWYLER LAMB
PRIMARY EXAMINER